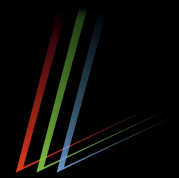
Video Game Play and Design: Procedural Directions



Janet Murray

Director of Graduate Studies
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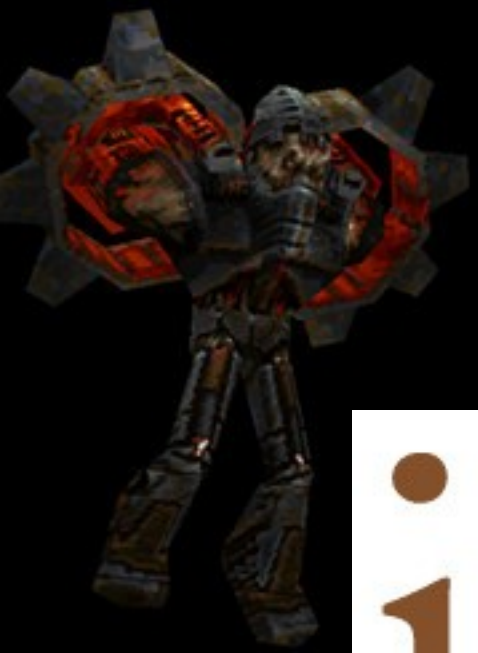
Georgia Institute of Technology

Procedural Character Design

Janet Murray



idt
INFORMATION DESIGN & TECHNOLOGY
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School of Literature, Communication, and Culture

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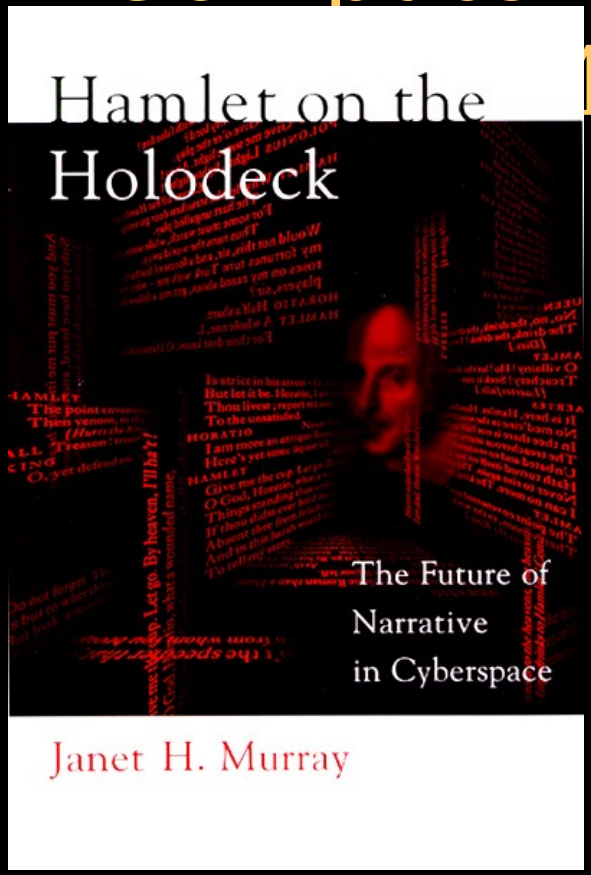
Computer as Storytelling Medium



- Can there be significant new forms of storytelling in the new digital medium?
- Yes, because it has its own expressive properties

What would it take to get there?

Characters Past

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Tell me more about your mother.

Eliza's animation did NOT inv

- Still images
- Moving images
- Sound
- "Multi" media

Joseph Weizenbaum,
Eliza 1966

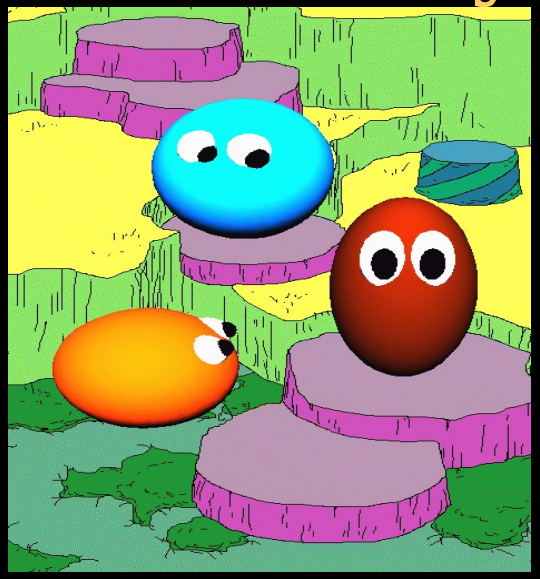
Why Eliza Works

Tell me more about your mother

Joseph Weizenbaum, Eliza 1966

- Pattern matching
- Shtick=formula
- Scripting the interactor
- Scenario!!

Why Woggles Worked



Joseph Bates, Woggles 1992

- Readable cartoon gestures of greeting, inviting, fear, menace…
- Shrimp’s programming glitch provided needed dramatic focus
- Believability not realism

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Virtual Pets

Silas, Bruce Blumberg, MIT 1994

Petz

Dogz, PFMagic 1990s

Autonomous Agent Architectures

Silas

- Based on science of animal behavior
- Elaborated model of inner states
- Everyday props,e.g. ball
- More complex, less dramatic

Dogz & Catz

- Based on shtick of cartoon critters
- Expressible model of inner states
- Dramatic props, e.g. mouse, catnip
- Less complex, more fun

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Lessons from the Past

- Scenario shapes expectation
- Props shape participation
- Don’t program what you cannot display
- Believability not realism
- Character elicited by interaction

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Characters Present

Characters in Immersive Worlds

- Genre fiction world provides scenarios, props, potential dramatic actions
- Detailing reinforces believability
- Range of characters limited

Weapon/Target Characters

Quake, id software

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Targets or Characters?

- Do they have their own trajectories?
- Do they move and act when we can't see them?
- Are they most interesting when on fire?

Deus Ex

Buddy Character

Paul Deus Ex

Hero and brother/sidekick are extensions of their weaponry

MMORGs:Massively Multiplayer Online Roleplaying Game Characters

- Expressive gestures derived from genre scenarios
- Need for dramatic compression
- More backstory than can be expressed in gameplay

Asheron's Call, 1999

Will Wright's The Sims (2000)

Yuppy scenario: shop, work, party, marry, parent
Persistent, detailed, participatory world

Why the Sims Works

- Readable social actions
- Bildungsroman plot, courtship and work ethic scenarios
- Expressible states
- BUT: problem of focus remains

Improving Character Simulations

- Dramatic Compression
  - Time
  - Event structure
  - Episodic structure
- Dramatic Actions
  - Fewer Chores!
  - Dramatic Props

Janet Murray

Characters Future

Parameterized Characters

Questing hero:

- Heritage Group
- Appearance
- Clothing
- Profession
- Attributes
- Skills

Parameterized Characters

Roommate:

- Neat
- Outgoing
- Active
- Playful
- Nice

Parameterized Characters

Danish Prince??

- melancholy?
- tolerance for flattery?
- irony?
- self-doubt?
- homicidal/suicidal?
- madness meter?!

Cyberdrama

the holodeck hamlet?

Dramatic ?

Characters ?

Replay Story

Scenario

Stereotype

Behavior

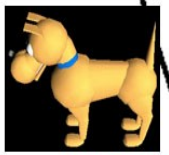
Genre types

Robot Yuppies

Superkiller's helper

Comical Pets

Shooter's Targets



Artificial Life

Game Piece

Lifelike

Sarah Cooper:
Reliving Last Night

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reliving.mov

Reliving Last Night

an interactive narrative by sarah cooper

Re-live

reliving.mov

Getting Dressed

reliving.mov

Coke

reliving.mov

Kiss

reliving.mov

Getting Music

reliving.mov

Gigolo

reliving.mov

Andre's Visit

reliving.mov

Variant character / Variant POV

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Creative Applications Lab

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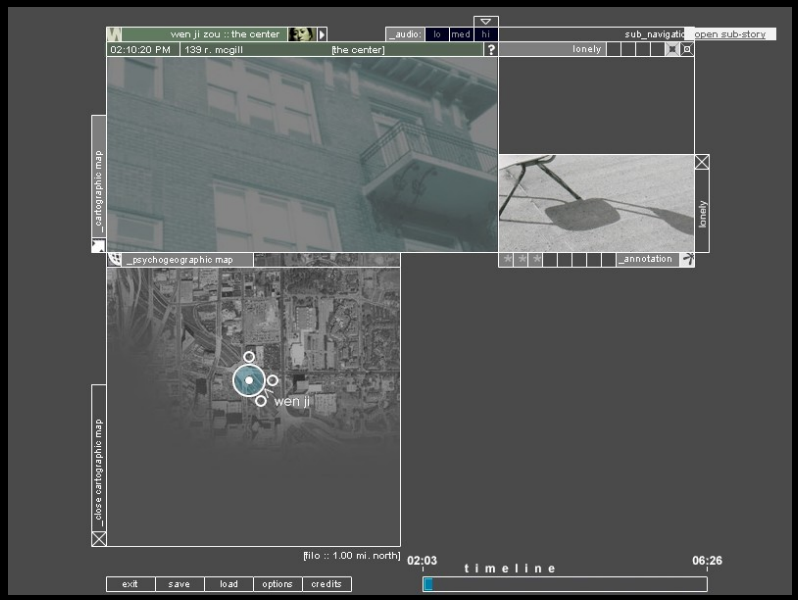
Buford Highway



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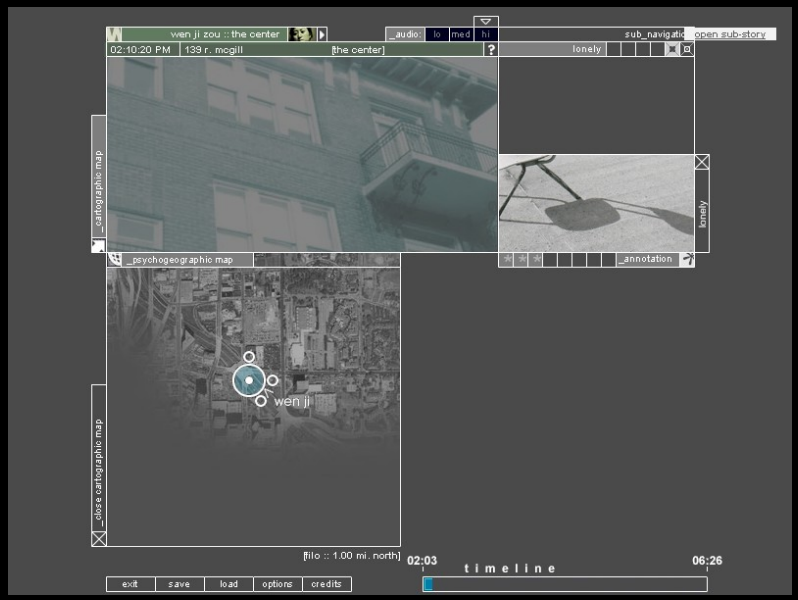

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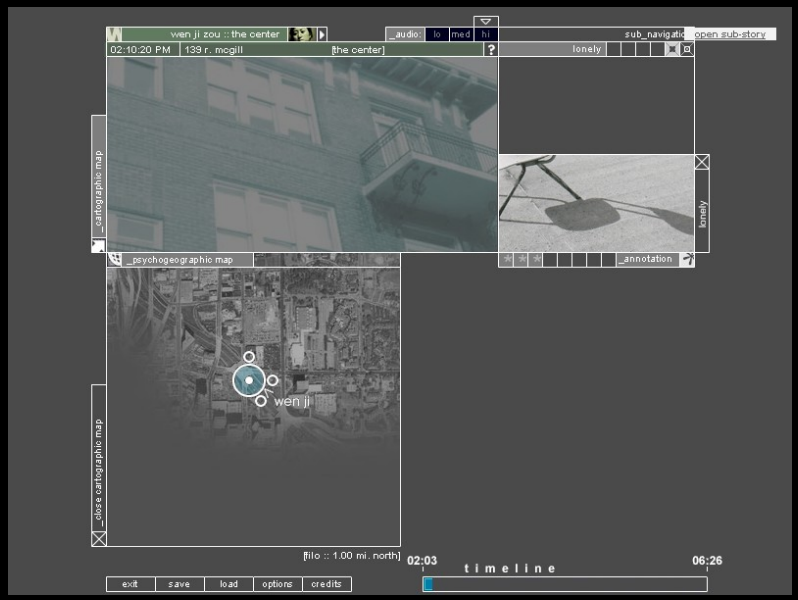

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